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ICF Consulting / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Matt Mitguard
Site Assessment Manager
States, Tribes & Site Assessment Section, SFD-9-1

THROUGH: Rose Fong RF
ESAT Project Officer
Quality Assurance (QA) Office, PMD-3

FROM: Doug Lindelof
Data Review and QA Document Review Task Manager
Environmental Services Assistance Team (ESAT)

ESAT Contract No.: 68-W-01-028
Task Order: B01
Technical Direction No.: B0105180 Amendment 1

DATE: June 26, 2003

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

SITE:	Jalk Fee
SITE ACCOUNT NO.:	09 ZZ LA00
CERCLIS ID NO.:	CAD0000024554
CASE NO.:	31520
SDG NO.:	MY0SK8
LABORATORY:	Bonner Analytical Testing Co. (BONNER)
ANALYSIS:	Total Cyanide
SAMPLES:	5 Soil Samples (see Case Summary)
COLLECTION DATE:	March 18, 2003
REVIEWER:	Stan Kott, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA Task Order Project Officer (TOPO) for the ESAT Contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Edward Messer, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9
ESAT File
CLP PO: [X]FYI [ ]Action

SAMPLING ISSUES: [ ]Yes [X]No

B0105180-2699/31520MY0SK8RPT.wpd

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL # of pages ►

To C. C ASTELANA From M Mitguard

Dept./Agency Phone #

Fax # 816-352-1801 Fax #

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

Data Validation Report

Case No.: 31520 SDG No.: MY0SK8
Site: Jalk Fee
Laboratory: Bonner Analytical Testing Co. (BONNER)
Reviewer: Stan Kott, ESAT/LDC
Date: June 26, 2003

I. Case Summary

SAMPLE INFORMATION:

Samples:	MY0SK8, MY0SK9, MY0SL0, MY0SL1, and MY0SL2
Concentration and Matrix:	Low Concentration Soil
Analysis:	Total Cyanide
SOW:	ILM05.2
Collection Date:	March 18, 2003
Sample Receipt Date:	March 20, 2003
Preparation Date:	March 21, 2003
Analysis Date:	March 21 and 22, 2003

FIELD QC:

Field Blanks (FB):	Not Provided
Equipment Blanks (EB):	Not Provided
Background Samples (BG):	MY0SK8 and MY0SK9
Field Duplicates (D1):	MY0SL1 and MY0SL2

Method Blanks and Associated Samples :

PBS:	Samples listed above

LABORATORY QC:

Matrix Spike :	MY0SL0S
Duplicates :	MY0SL0D

ANALYSIS : Total Cyanide

Analyte	Sample Preparation Date	Analysis Date
Cyanide	March 21, 2003	March 21, 2003
Percent Solids		March 22, 2003

CLP PO ACTION:

None.

SAMPLING ISSUES:

None.

ADDITIONAL COMMENTS:

The solid laboratory control standard (LCS) source ERA 246 listed on Form 7 and the initial calibration verification (ICV) standard lot number 0500 listed on the laboratory cyanide soil sample preparation form do not match the information submitted in the laboratory's telephone record log (TRL) response. The LCS source and ICV standard lot number indicated in the laboratory's TRL response are EPA 0899 and 0400, respectively. Since the true concentrations of these standards listed on the forms are identical to the true concentrations provided in the TRL response, no adverse effect on data quality is expected.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW) have been met.

Analytical results with qualifications are listed in Table 1A. Definitions of data qualifiers used in Table 1A are listed in Table 1B.

This report was prepared in accordance with the following documents:

- ESAT Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work (SOW) for Inorganic Analysis Multi-Media, Multi-Concentration, Inorganic Analytical Service for Superfund ILM05.2*, December 2001; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, July 2002.

II. Validation Summary

The data were evaluated based on the following parameters:

Parameter		Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. ICP-MS Tuning Analysis		
	d. CRQL Check Standard (CRI)		
4.	Blanks	Yes	
5.	ICP Interference Check Sample (ICS)	Yes	
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	Yes	
8.	Spike Sample Analysis	Yes	
9.	ICP Serial Dilution Analysis	Yes	
10.	ICP-MS Internal Standards	N/A	
11.	Field Duplicate Sample Analysis	Yes	
12.	Sample Quantitation	Yes	
13.	Overall Assessment	Yes	

N/A = Not Applicable

III. Overall Assessment of Data

All of the method requirements specified in the USEPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW) have been met. The reported results for cyanide in all of the samples were appropriately and correctly calculated.

ANALYTICAL RESULTS

Table 1A

Case No. : 31520 SDG No. : MY0SK8

Site : JALK FEE

Lab : BONNER ANALYTICAL TESTING COMPANY

Reviewer : Stan Kott, ESAT/LDC

Date : June 26, 2003

Analysis Type : Low Concentration Water Samples For Cyanide

Concentration in mg/kg

Station Location :	JF-1-S5			JF-1-S15			JF-7-S20			JF-7-S30			JF-7-S35			MDL			CRQL		
Sample ID :	MY0SK8	BG		MY0SK9	BG		MY0SL0			MY0SL1	D1		MY0SL2	D1							
Collection Date :	03/18/2003			03/18/2003			03/18/2003			03/18/2003			03/18/2003								
PARAMETER	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
CYANIDE	1.1U			1.1U			1.1U			1.2U			1.2U			0.10			1.0		
PERCENT SOLIDS	93.9			92.3			91.7			82.2			82.9			N/A			N/A		

Val - Validity. Refer to Data Qualifiers in Table 1B.

Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.

MDL - Method Detection Limit, N/A - Not Applicable, NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs

FB - Field Blank, EB - Equipment Blank, TB - Trip Blank, BG - Background Sample

CRQL - Contract Required Quantitation Limit

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, July 2002.

U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

L Indicates results which fall between the method detection limit and the CRQL. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

J+ The result is an estimated quantity, but the result may be biased high.

J- The result is an estimated quantity, but the result may be biased low.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.

UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

In Reference to
Case 31520 SDG #: MY0SK8

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Telephone Record Log

Date of Call: _____

Laboratory Name: Bonner Analytical Testing Co. (BONNER)

Lab Contact: Chris Bonner

Region: 9

Regional Contact: Steve Remaley, CLP PO

ESAT Reviewer: ESAT Reviewer, ESAT/ICF-LDC

Call Initiated By: ____ Laboratory __X__ Region

In reference to data for the following sample(s):
SDG No.: MY0SK8
Samples: MY0SK8, MY0SK9, and MY0SL0 through MY0SL2

Summary of Questions/issues Discussed:

The following items were noted during the review of this sample delivery group (SDG). Please respond within 4 days as specified in Exhibit B, Section 2, 2.2 of the ILM05.2 Statement of Work (SOW). Send response and resubmissions to ICF Consulting, Inc./Laboratory Data Consultants, Inc., Environmental Services Assistance Team, Region 9, 1337 S. 46th Street, Building 201, Richmond, CA 94804, FAX 510 412-2304.

Note: A TRL was faxed on April 23, 2003 and re-faxed on April 28, 2003 to fax number: (601) 268-7084.

1. The reported MDL of 0.01 mg/kg for the soil preparation method (DS2) could not be confirmed using the equation presented in ILM05.2, Exhibit D, Section 11, 11.3.1.5.2. This section states that the minimum concentration value that can be substituted is the MDL value. Using the reported MDL value of 2.0 μg/L for the no preparation method (NP1), the lowest MDL for preparation method DS2 is 0.10 mg/kg. The result reported for sample MY0SK8 on Form 1 was between the MDL and CRQL. Since the instrument result for sample MY0SK8 (0.69 μg/L) is less than the MDL reported on the NP1 Form 9 (2.0 μg/L), the detected result should be revised and a corrected Form 1 for sample MY0SK8 submitted.

2. The drying time and oven temperature for the percent solids analysis were not provided as per SOW ILM05.2, Exhibit D, Section 1, 1.6. Please submit a copy of the percent solids raw data that indicate weights, drying times and oven temperature for this SDG per SOW ILM05.2, Exhibit B, Section 2, 2.5.2.3.

3. The equation used to calculate the reported sample results is not provided. Please submit a corrected SDG Narrative page to include the equation used to calculate sample results per SOW ILM05.2, Exhibit B, Section 2, 2.5.1.2.

In Reference to
Case 31520 SDG #: MY0SK8

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM (continued)

4. Form 12, Preparation Log, indicates preparation method DS2 (Midi-distillation of soil samples). Please submit a corrected SDG Narrative page to indicate the addition of magnesium chloride per SOW ILM05.2, Exhibit D, Section 10, 10.2.4.2.7.

5. The logbook pages for cyanide analysis provide reference numbers for the calibration standards and QC standards used. However, Region 9 also requests that certificates of traceability for relevant calibration and QC standards be submitted. Information should include manufacture, lot number, laboratory reference number, and concentration.

For future reports (no response required):

1. SDG Narrative page is labeled Case Narrative. Please correct page title to conform to SOW ILM05.2, Exhibit B, Section 2, 2.5.1.2.

2. Please sign and date airbill(s) and/or airbill sticker(s) when samples are received by the laboratory per SOW ILM05.2, Exhibit B, Section 3, 3.5.2.1.

3. Forms DC-2-1 and DC-2-2 have a 'CHECK' section. Please check off documents included in the CSF under the 'LAB' column.

Summary of Resolution:

The response from the laboratory, received on June 16, 2003, was satisfactory. Note that the equation provided by the laboratory in response to item 3 of the TRL is incorrect. The correct equation for soil samples prepared by Midi distillation is as follows:

$$\text{Cyanide mg/kg} = \frac{[\text{Results(ug/L)} * \text{Vol.(L)}]}{\text{Sample Wt.(g)}} \Big/ (\text{Percent Solids}/100)$$

The results reported by the laboratory on the Form 1s were correctly calculated.

Regional Contact Signature Date of Resolution